

## APPENDIX A

Table 4-1 (Continued)  
PHYSICAL CONSTANTS OF INORGANIC COMPOUNDS

Name	Formula	Relative weight	Color, crystalline form, refractive index	Density	Melting point, °C	Boiling point, °C	Solubility in 100 parts
Europlum							
(III) sulfate-8-water	$\text{Eu}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O}$	736.23	lt. pink		-8H <sub>2</sub> O, 375	d 1600	2.5 g <sup>20</sup>
sulfide	$\text{EuS}$	184.02	blk. cub	5.75	1597		
fluoride	$\text{EuF}_3$	279.6	cub	1.554 <sup>25</sup>	-219.70	-108.20	d
fluorosulfate	$\text{F}(\text{SO}_3\text{F})$	38.00	yel-grn gas, 1.000(1875)	(g/L)			
nitride	$\text{F}(\text{NO}_2)$	118.06	col. gas	1.70-1.74	-158.5	-31.3	
nitride, tel-	$\text{F}(\text{NO})$	81.01	col. gas	(g/L)			
perchlorate	$\text{F}(\text{ClO}_4)$	60.92	grn-yel gas	1.507 <sup>25</sup>	-175	-65.9	by d, meet
Fluoroamine, di-	$\text{H}(\text{NF}_2)$	102.45	col. gas, expl	4.8 g <sup>25</sup>	-154	-82	
Fluoroboric acid	$\text{H}(\text{BF}_3)$	53.01	volatile gas	(g/L)	-167.3	-15.9 <sup>25</sup>	d
Fluorophosphonic acid	$\text{H}_2(\text{PO}_3\text{F})$	87.81	col. liq		-116	-23.6	
Fluorophosphonic acid, di-	$\text{H}_2(\text{PO}_3\text{F})_2$	99.99	col. oily liq	1.818	d 130		
Fluorophosphoric acid, hexa-	$\text{H}_6(\text{PO}_3\text{F})_6$	102.99	col. fum liq	1.583	-80		
	$\text{H}(\text{PF}_6)$	145.97	col. fum liq	1.65	-96.5	115.9	
Fluorosilicic acid, hexa-	$\text{H}_6(\text{SiF}_6)$	344.08	col. fum liq, 1.3465	1.463	d		
Fluorosulfonic acid	$\text{H}(\text{SO}_3\text{F})$		61% soln				
Gadolinium							
acetate-8-water	$\text{Gd}(\text{C}_2\text{H}_3\text{O}_2)_3 \cdot 8\text{H}_2\text{O}$	100.07	col. liq	1.741 <sup>25</sup>	-87.3	165.5	
bromide, hexa-	$\text{GdB}_3$	157.25	metal, hep	7.895	1306	3000	
bromide	$\text{GdB}_3$	406.45	col. vtrc	1.611			21.6 <sup>25</sup>
chloride	$\text{GdCl}_3$	222.11	blue, cub	4.65			
fluoride	$\text{GdF}_3$	396.96	col. rhhd	4.57	770	1490	
hydride, di-	$\text{GdH}_2$	263.61	wh. hex, hygr	4.52 <sup>25</sup>	602	1580	
	$\text{GdH}_2$	214.25	wh. hex	7.047	1231	2777	
	$\text{GdH}_2$	199.27		7.08			
Gadolinium							
bromide	$\text{Gd}(\text{OH})_3$	308.7	brnase				
iodide, di-	$[\text{Gd}^{3+}(\text{e}^-)(\text{I}^-)_2]$	411.06					
iodide, tri-	$\text{GdI}_3$	537.96	yel. hex	2.321	925		
nitrate-8-water	$\text{Gd}(\text{NO}_3)_3 \cdot 8\text{H}_2\text{O}$	451.36	col. tric, deliq		d 116		
oxalate-10-water	$\text{C}_2\text{H}_2(\text{C}_2\text{O}_4)_3 \cdot 10\text{H}_2\text{O}$	758.71	col. mm	7.64	3349		
sulfide	$\text{Gd}_2\text{S}_3$	362.50	wh. mm, hygr	3.309	-8H <sub>2</sub> O, 130		
selenate-8-water	$\text{Cd}_2(\text{SeO}_4)_3 \cdot 8\text{H}_2\text{O}$	887.50	pearly, mm	1860			
selenide	$\text{CdSe}$	236.2	cub	4.139 <sup>15</sup>	d 500	2.60 <sup>25</sup>	
sulfate	$\text{Cd}_2(\text{SO}_4)_3$	607.68	col	3.010 <sup>15</sup>	anhyd 400	4.08	
sulfate-8-water	$\text{Cd}_2(\text{SO}_4)_3 \cdot 8\text{H}_2\text{O}$	746.81	col. mm		2027		
sulfide	$\text{CdS}$	189.3	cub		1865		
(di) sulfide, tri-	$\text{Cd}_2\text{S}_3$	419.69	yel-brn, cub, hygr	3.8			

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